Federal Aviation Administration

MMEL Policy Letter (PL) 105, Revision 2

Date:	Month DD, YYYY
To:	All Region Flight Standards Division Managers All Aircraft Evaluation Group Managers
From:	Manager, Air Transportation Division, AFS-200
Reply To Attn Of:	Manager, New Program Implementation and International Support Branch, AFS-240

~~**MMEL GLOBAL CHANGE (GC)**~~

~~This GC is an approved addendum to all existing MMEL documents. The operator may seek use of the specific relief contained in the PL by revising the Minimum Equipment List (MEL). In doing so, the sample proviso stating the relief in the PL must be copied verbatim in the operator's MEL. Approval of the revised MEL is gained through the assigned Principal Operations Inspector (POI) utilizing the established procedure. This GC expires XX/XX/20XX.~~

Subject: Automatic Dependent Surveillance-Broadcast (ADS-B) System

MMEL CODE: 34 (NAVIGATION)

REFERENCE: PL-105, Revision 1, dated January 20, 2009
PL-105, Original, dated October 11, 2000
14 CFR 91.225 and 91.227
FAA AC 20-165 and FAA AC 20-172

PURPOSE:

To provide standardized Master Minimum Equipment (MMEL) requirements for Automatic Dependent Surveillance-Broadcast (ADS-B) System.

DISCUSSION:

Revision 2 replaces the previous discussion that addressed a specific ADS-B system installation with information applicable to all ADS-B installations.

Revision 1 reformats PL-105 to reflect current ADS-B operations.

ADS–B consists of two different functions: ADS–B Out and ADS–B In.

ADS–B Out periodically broadcasts information about each aircraft, such as identification, current position, altitude, and velocity, through an onboard transmitter. ADS–B Out provides air traffic controllers with real-time position information that is, in most cases, more accurate than the information available with current radar-based systems.

ADS–B In refers to an appropriately equipped aircraft's ability to receive and display another aircraft's ADS–B Out information as well as the ADS–B In services provided by ground systems such as Automatic Dependent Surveillance–Rebroadcast (ADS–R), Traffic Information Service–Broadcast (TIS–B), and Flight Information Service–Broadcast (FIS–B).

Operators have two options for ADS-B: the 1090 extended squitter (1090ES) broadcast link with performance requirements specified in TSO-C166b or the Universal Access Transceiver (UAT) broadcast

link that operates on 978 MHz and has performance requirements specified in TSO-C154c.

After January 2020, 14 CFR requires aircraft flying at and above 18,000 feet MSL (FL 180) to have ADS–B Out performance capabilities using the 1090ES broadcast link and that aircraft flying in the designated airspace below 18,000 feet MSL may use either the 1090 MHz ES or UAT broadcast link.

POLICY:

The following standard MMEL proviso and repair category is adopted to provide standardization among all MMELs:

ATA 34 NAVIGATION	Repair Interval	Number Installed	Number Required for Dispatch	Remarks or Exceptions
Automatic Dependent Surveillance-Broadcast (ADS-B) System ***	C	-	0	(O)May be inoperative provided alternate procedures are established and used. NOTE: Any ADS-B function that operates normally may be used.
	D	-	0	May be inoperative provided operations do not require its use.
ADS-B Out Extended Squitter Transmissions ***	C	-	0	(O)May be inoperative provided alternate procedures are established and used. NOTE: Any ADS-B Out function that operates normally may be used.
	D	-	0	May be inoperative provided operations do not require its use.
ADS-B Out UAT Transmissions ***	C	-	0	(O)May be inoperative provided alternate procedures are established and used. NOTE: Any ADS-B Out function that operates normally may be used.
	D	-	0	May be inoperative provided operations do not require its use.

Each Flight Operations Evaluation Board (FOEB) Chair should apply this Policy to affected MMELs through the normal FOEB process.

Leslie H. Smith
Manager, Air Transportation Division